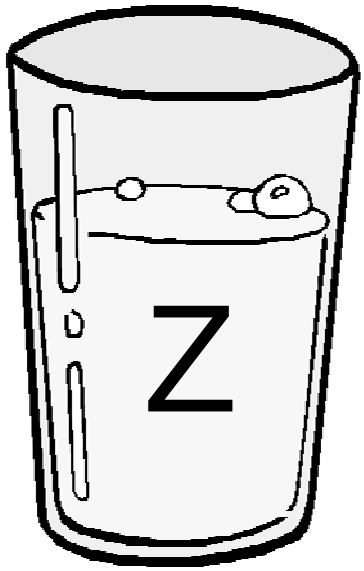
EPA Region 9 - Water Division

Drinking Water Tribal Set-Aside Grants

Guidance to Applicants



August 2003

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I. Description of Program

The 1996 amendments of the Safe Drinking Water Act (SDWA) provided for a Drinking Water State Water Revolving Fund similar to the Clean Water Program fund that has been in existence for the past 10 years. The SDWA contains a provision setting aside 1½ percent of the annual appropriation for drinking water systems that serve Indian Tribes[1]. The appropriation will be used to provide grant funding to Tribes to improve public drinking water system infrastructure and address the most significant threats to public health.

While EPA headquarters issued national guidance for this Tribal grant program, each EPA region had significant flexibility in developing regional funding procedures. EPA Region 9 formed a workgroup with Tribal representatives to develop these procedures. The goal of this workgroup was to develop a grant program that meets the needs of Tribal populations and is consistent with the objectives of the SDWA and the national guidance.

This regional guidance is meant to provide Tribes with a general overview of the grant program and a description of the requirements for applying for and obtaining a grant. As discussed in greater detail in the following sections, the grants are being offered to Tribes to improve drinking water infrastructure serving predominantly Tribal populations. Tribes must show that water systems have, or will develop, the technical, managerial, and financial capacity to properly maintain the grant-funded facility.

II. Applicant and Project Eligibility

A. Which Tribes and water systems are eligible under this grant program?

1. Only federally recognized Tribes may apply for this grant funding[1].

2. Only public water systems that are community water systems or non-profit, non-community water systems are eligible to receive grants[2].

    - A public water system is defined as an entity that supplies water for human consumption and has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. It may include collection, treatment, storage, and distribution facilities.

    - A public water system is either a "community water system" or a "non-community water system." A community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A non-community water system means any public water system that is not a community water system.

3. The system must serve an Indian Tribe[3]. Grant funding can be provided to improve **any** eligible public water system, whether or not it is owned by a Tribe, on or off-reservation, or serving Tribal communities living on or off-reservation. Since Tribes will be applying

for funds on behalf of the water system, EPA Region 9 will assume that the water system serves a Tribe, as required by the Safe Drinking Water Act, and the requested improvements are a high Tribal priority. In cases where commercial entities and/or non-tribal populations receive water from the public water system, EPA Region 9 may ask the Tribe to provide a match for the grant funds.

4. Systems that are in significant noncompliance with any requirement of the National Primary Drinking Water Regulations will not be eligible for funding unless the project which is being funded will ensure compliance[2].

5. Tribes will only receive funding for a project if they can demonstrate that the utility has, or will develop, the capacity to properly maintain the water system (see Section VII)[4].

6. Tribes may apply for more than one project in any given year.

B. What types of projects can be funded through this grant program?

Projects funded through the Tribal Drinking Water Set-Aside Program must address the most significant threats to public health associated with public water systems that serve Tribal populations. Eligible projects (or portions of projects) must ensure compliance with the National Primary Drinking Water Regulations (NPDWRs) or otherwise further the health protection objectives of the SDWA[5]. As stated in the national guidance, eligible improvement projects can:

Rehabilitate or develop sources (excluding reservoirs, dams, dam rehabilitation and water rights);

Install or upgrade treatment facilities;

Install or upgrade storage facilities, including finished water reservoirs;

Install or replace transmission and distribution pipes;

Physically consolidate existing public water systems or connect homes currently on private wells to existing public water systems if there is a public health risk. *(Note that only Tribes can apply for grants, not individual home owners)*; and

Connect homes that are not currently connected to an existing public water system (if the current source of the drinking water available to the homes is contaminated or is otherwise posing a risk to the public health of the Tribe).

Addendum 99-1 to the national guidance now allows grant funding for the creation of new community water systems to address existing public health problems caused by unsafe drinking water provided by individual wells or surface water sources. The new policy also allows the creation of new regional community water systems created by consolidating several existing systems that have technical, financial, or managerial difficulties. Before funding the creation of

a new system, EPA must ensure that all of the potentially affected parties have been notified and that the Tribe has considered alternative solutions to addressing the problem. The national guidance requires grants for the creation of new systems be made only if the following conditions are met:

upon completion of the project, the entity created must meet the Federal definition of a community water system (see page 1),

funding is limited to projects where an actual public heath problem with serious risks exists,

the project must be limited in scope to the specific geographic area affected by the health risk,

the project can only be sized to accommodate a reasonable amount of growth expected over the life of the facility - growth cannot be a substantial portion of the project,

the system, upon completion, must have adequate technical, financial, and managerial capacity, and

the project is a cost-effective solution to solving the public health problem.

Most of the grant funds awarded in this program will go directly towards construction of water infrastructure projects. However, EPA Region 9 realizes that there are areas where Tribes have serious concerns about the quality of their drinking water, yet the best solutions have not yet been identified. To address these cases, grant funding can be used for feasibility studies. When submitting proposals, applicants can request assistance for a feasibility study, or, if a study has already been completed, for construction funding. If EPA Region 9 determines that a project's feasibility study is not adequate, the applicant may be awarded funds to complete a more comprehensive feasibility study rather than construction funding. EPA Region 9 may also award funds to complete an environmental document (to comply with the National Environmental Policy Act). Once projects have a completed, adequate feasibility study, applicants can apply (or reapply) for construction funding during the next application cycle. Note that the level of effort and depth of analysis required for the feasibility study are proportional to the size and complexity of the proposed project. See Appendix A for a description of feasibility study requirements.

*C. What types of projects **cannot** be funded through this grant program?*

Grant funding is not allowed for:

Monitoring (that is needed to meet requirements of Safe Drinking Water Act)[2];

Operation & maintenance[2];

Land acquisition (unless the land is integral to the project and is from a ***willing seller***)[2];

Dams, or rehabilitation of dams[6];

Water rights (except if the water rights are owned by a public water system that is being consolidated)[6];

Reservoirs (except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located)[6];

Projects needed primarily for fire protection[6]; or

Projects intended primarily for future growth[6].

III. Grant Application Process

To minimize the workload to Tribes, the grant application process will be divided into two steps. A flow chart setting forth the entire process is presented in Appendix B.

The first step will be the submittal of a project proposal. A Project Proposal Form is attached as Attachment 1 (instructions are presented in Section VIII). Tribes should include copies of completed feasibility studies and environmental documents (if available). Feasibility studies are discussed in Section II.B. above, and EPA Region 9 feasibility study criteria are presented in Appendix A. EPA Region 9 will use the information in the proposal package to place projects on a priority list, using the process described in Section IV. As mentioned earlier, a Tribe may submit more than one project proposal in a given year, and in most cases, each project will be separately ranked. Additionally, if Tribes submitted a project proposal in a previous year, they can contact their PWSS Program Manager (listed in Section X) to request that the project be re-ranked during the next funding cycle. After EPA preliminarily ranks the project proposals received, each applicant Tribe will be informed how its proposal(s) ranked and given the opportunity to verify and comment on EPA's ranking of the project. EPA Region 9 will then finalize and publish the priority list and select projects in that order. The number of projects selected is dependent on the amount of funding available and the costs of the top projects. Only projects identified for funding based on their placement on the priority list will proceed with the second step, the formal grant application.

As mentioned in Section II, the formal grant application (and proposals) must be submitted by a federally-recognized Tribe. As part of the formal grant application, the Tribe must determine who will manage the grant, and who will be responsible for each aspect of construction. The grant application includes a checklist that describes who will handle the various aspects of project management, planning, design, and construction management and plan and specification review. The list includes the many participants needed in a grant funded construction project. These participants are necessary to ensure that grant conditions are met and that the treatment works are built correctly and at an appropriate cost. The Tribe may have adequate resources internally to ensure that the project is properly managed, or may wish to work with the Indian

Health Service, another agency, or consulting firm (at the request of a Tribe, funding can be transferred to the Indian Health Service through an Interagency Agreement). EPA Region 9 will closely examine the list of proposed members of the project team. If EPA Region 9 finds that one or more members are unqualified to ensure that federal funds are properly managed, the Tribe will need to add qualified personnel. In the formal grant application, Tribes must also submit capacity checklists. Capacity is discussed more in Section VII below. To obtain copies of the project management and capacity checklists, contact the appropriate Program Manager (see Section X).

Grant negotiations may include discussions regarding projects partially benefitting commercial and/or non-Tribal populations served by the system being improved. Grants for these systems may include conditions requiring partial contributions by other users. Examples of other grant conditions which a Tribe may expect to receive are included in Appendix C.

IV. Project Selection Criteria

How will projects be ranked?

Each year, EPA Region 9 will receive drinking water Tribal set-aside funds. Those funds will be allotted to the highest priority projects. Project ranking will be based on the two-step process described on the following pages.

Step One. The national guidance requires that the highest health risks be addressed first[5]. Therefore, in the first step in the ranking process, EPA Region 9 will categorize proposed projects by the public health problem to be resolved. If a project has more than one component, each component will be placed into one of the following health categories. The following health categories are ranked from highest priority to lowest:

Health Categories

Higher Priority	Category A	Demonstrated illness attributable to the water system
	Category B:	Microbial contamination of the water supply resulting in a repeated coliform bacteria maximum contaminant level (MCL) violation
	Category C:	Unfiltered surface water or ground water under the influence of surface water.
	Category D:	Filtered surface water and ground water under the influence of surface water that violates surface water filtration or disinfection regulations.
	Category E:*	Insufficient water supply resulting in water outages occurring for an extended period that could not be corrected through operational improvements.
	Category F:** *(see footnote)*	Arsenic contamination F1: 50 ppb and above F2: 25-49 ppb F3: 11-24 ppb
	Category G:	Nitrate/nitrite contamination exceeding MCL.
	Category H:	Lead contamination exceeding Action Level or Treatment Technique.
	Category I:	Chemical contamination (other than nitrate/nitrite) exceeding a primary MCL.
	Category J:	Copper contamination exceeding Action Level or Treatment Technique.
	Category K:	Significant sanitary defect involving sewage, or disinfection facilities that have defects, or uncovered distribution reservoirs, or documented inadequate pressure potentially causing cross-connection contamination.
Lower Priority	Category L:	Systems meeting existing MCLs but not future MCLs or Action levels, or Iron/Manganese problems, or Other water system deficiencies.

* Qualification for Category E will be based on water supply information requested in the Project Proposal Form including available well capacity, storage capacity, and frequency of documented water outages.

** Category F has been broken into three subcategories; F1, F2, and F3. Projects within the subcategory of F1 are highest priority, followed by projects within subcategories F2 and F3 respectively.

Step Two. Once all of the proposed projects are placed in the above categories, projects will be further prioritized, ***within each lettered health category***, using the following ranking system:

Ranking System (Maximum Total Points: 43):

Criterion	Points
1) Consolidation	
a) Project Consolidates More Than Two Systems	5
b) Project Consolidates Two Systems	3
2) Aesthetics	
Project will solve taste, odor, color and/or clarity problems (secondary standards)	3
3) Population Served (for consolidation projects use the population of the system being ranked in the health category)	
a) Less than 100 people	5
b) 100 to 250 people	4
c) 250 to 500 people	3
d) 500 to 750 people	2
e) 750 to 999 people	1
4) Tribal Population Served	
a) At least 90% of population served is Tribal	7
b) At least 75% of population served is Tribal	4
5) Tribal Ownership	
a) System is Tribally owned	5
6) Grant Amount Per Connection	
a) Less than $1,000 per household	5
b) $1,000 to $1,999 per household	4
c) $2,000 to $4,999 per household	3
d)$5,000 to $9,999 per household	2
e) $10,000 to $14,999 per household	1
7) Additional Benefits (2 points each - max 8 points)	
a) System Has Water and/or Energy Conservation Measures	2
b) System Has or is Implementing Source and/or Wellhead Protection Programs	2
c) System has Metering and Billing by Water Usage	2
d) System has a Certified Operator	2
8) Total Estimated Grant Amount	
a) Less than $100,000	5
b) $100,000 to $199,000	4
c) $200,000 to $299,000	3
d) $300,000 to $499,000	2
e) $500,000 to $750,000	1

After EPA Region 9 preliminarily ranks a project proposal, the applicant Tribe will be informed

as to how its proposal(s) ranked and will be given the opportunity to verify and comment on the rationale for the ranking. After considering the comments, EPA Region 9 will rank each project in order of priority. As required by EPA's national guidance, EPA will then provide the entire list of projects (including estimated costs) to all Tribes and other interested parties.

V. Emergencies

EPA Region 9 will set aside 5% of the current year's annual appropriation for crises resulting from natural disasters and acute health risks that occur after the project priority list is finalized.

VI. Design Standards

For designing new facilities and renovating existing facilities, EPA Region 9 has adopted the "Recommended Standards for Water Works" (i.e. Ten States Standards) as our general design guidance. This document is published by the "Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers." EPA Region 9 is currently revising some sections of these standards to better address our regional needs; however, until the revision process is complete, all deviations from the recommended Ten States Standards must be reviewed and accepted by Region 9's technical review committee. Additionally, any deviations will require submission of reference material. (**Note**: Copies of the "Ten States Standards" can be ordered by calling the publishers at (518) 439-7286.)

All products, materials (including pipes, fittings, and valves) and construction methods used in the rehabilitation/construction of water distribution systems shall conform to the applicable American Water Works Association (AWWA) Standards, National Sanitation Foundation Standards (NSF) and/or American National Standards Institute (ANSI).

VII. Capacity

EPA's national policy is that all water system owners must have the technical, financial, and managerial capacity to properly run their water utilities in order to receive funding. If utilities do not currently have adequate capacity, system owners must make appropriate changes in operation (management, rate structure, maintenance, consolidation, alternative supplies, etc) to ensure the long term capability of the system. If a system does not have, or will not be able to develop capacity, it will not be eligible to receive drinking water Tribal set-aside funds.[4]

A. What is capacity?

EPA characterizes the three elements of technical, financial, and managerial capacity to properly run the water system as follows:

Technical capacity refers to: the physical infrastructure of the water system (the capability of the system components to provide water that meets the requirements of the SDWA), and the technical knowledge of the system personnel and their ability to use that knowledge to adequately operate the system. Requirements for adequate technical capacity include:

a) employment of certified operator (as appropriate for system):

Customers of any public water system need to be provided with an adequate supply of safe, potable drinking water. To attain this, it is essential that public water system operators are trained and certified and that they have knowledge and understanding of the public health reasons for drinking water standards. Without qualified and trained operators public health cannot be adequately protected.

b) adequate staff to operate the system:

It is important to allow sufficient time for staff to examine the system, conduct preventive maintenance, ensure that conditions remain sanitary, address problems as quickly as possible to avoid a loss of pressure, prevent a lack of water; continue proper operation etc. This can be done by a variety of methods, but public health and the water system must be priorities of the operator(s).

c) ability to adequately survey system:

Operating a system requires regular inspections of the facilities, (including the inside and outside of storage tanks, pump houses, and well heads), flushing gate valves regularly, etc. To achieve this the operator needs to be able to have access to vehicles when facilities are not located within immediate walking distance.

d) availability of the tools and measurement devices necessary to perform routine operation and maintenance on the system:

Operators must have the ability to address a problem and to conduct routine maintenance, such as changing leaky gaskets, flushing valves, fixing chlorinators, and measuring chlorine and fluoride levels.

e) existence of as-builts:

The existence of as-builts allows operators to properly conduct necessary maintenance activities such as flushing the system regularly, locating shut-off gate valves to isolate a water line break, and knowing where the system is for excavation.

f) ongoing training and safety programs:

Ongoing training allows operators to sharpen their skills and better address system operations. Safety programs are necessary because a water system can be a dangerous place: high voltage areas and confined spaces are present, slippery surfaces exist, high structures must be climbed, and potentially dangerous treatment chemicals must be handled.

Financial capacity includes the ability of the system to maintain sufficient revenues to cover operation costs and the effective management of those resources to operate the system. In effect, is the system financially healthy. Requirements for adequate financial capacity include:

a) an adequate written budget (and process in place) to pay for staff, chemicals, power, maintenance, monitoring:

Financial capacity is key to proper operation and maintenance. A written budget is the first step. Though often smaller systems cost more per user than large systems (because of economies of scale), most ground water systems are relatively inexpensive as a necessary utility. Costs in some areas have been estimated below $20 per household connection. It is important for communities to make enough funds available to properly operate and maintain the system. Users must also pay their bills to ensure the financial stability of the system. The systems should have procedures in place to encourage prompt customer payment.

b) a capital replacement plan (or at a minimum, identification of capital replacement needs):

This ensures that money is set-aside from the budget to address expected repairs that happen on a regular basis for such things as pump and tank clean-outs. If these are not set aside in the budget, it may lead to a budget shortfall when the items need replacement.

c) funding for budget identified (whether through users or general fund) at beginning of year:

To ensure continued operation at a reasonable cost, a budget must be developed and funds identified. This allows the system to address expenses in a reasonable manner as opposed to expending greater amounts when the foreseen emergency arises (e.g. a pump due for replacement breaks down over weekend, creating a need to expedite shipment and pay overtime).

d) record keeping for budget, use, operations, and equipment:

For consistently efficient operations, it is necessary to anticipate budget expenses and equipment needs ahead of time.

Managerial capacity includes such things as ownership accountability; the ability of management to adequately staff the system with qualified personnel; an understanding of the regulatory requirements involved in operating a water system; and the ability to interact well with customers and regulators. Requirements for adequate managerial capacity include:

a) all monitoring required by the Safe Drinking Water Act is consistent and up-to-date:

While monitoring itself does not correct health problems, it is necessary to determine the quality of water and ensure protection of public health. Though not eligible for funding, monitoring is required by law.

b) system management:

The responsibilities of the managers must be well-defined and in written form. The "checks and balances" on those with responsibility for the system should also be well-defined and in written form (e.g. water board, Tribal council review). The division/delegation of responsibility will clearly be more complex with a water utility or larger water system than with a small water system.

c) development and implementation of source water protection plan:

Source water protection is necessary to ensure that once the water source is developed, it remains safe for human consumption.

B. Why is capacity needed if a health risk is present?

Although the Safe Drinking Water Act does not expressly include capacity requirements under the Tribal set-aside program, EPA's national policy is to ensure that consumers are continually provided safe drinking water and that the government's investment in Tribal water systems is protected.[4] The investment in physical infrastructure is only one part of ensuring safe drinking water delivery. Lack of proper operations and maintenance may lead to deterioration of the infrastructure and unsanitary conditions. Proper staffing, management, financial planning, and funding are crucial to ensure that operations and maintenance are adequate.

C. How does capacity affect eligibility?

It is important to note that a utility's capacity will not affect a project's placement on the grant priority list. EPA Region 9 will rate projects solely using the methodology presented in Section IV. Only after a project ranks high enough to receive funding will an assessment of capacity occur. The assessment will include a self evaluation by the Tribe (in the form of capacity checklists) and, if necessary, further analysis by a team of experts to review the utility's

technical, managerial, and financial capacity. If EPA Region 9 determines that a utility does not have adequate capacity to operate and maintain the system, the system owner would have to agree to take appropriate steps to ensure that the utility develops the appropriate level of capacity. Appropriate steps may include some or all of the following:

Training and certifying existing system personnel or hire trained and certified personnel,

Developing a source water protection plan,

Developing an infrastructure replacement plan,

Instituting a long-term program to provide any needed operation and maintenance,

Conducting an analysis of the system's financial health,

Adopting a rate structure that will provide the system with sufficient resources to adequately maintain and operate the system,

Establishing a reserve fund to replace infrastructure reaching the end of its useful life, or

Establishing an entity to manage and operate the system.

EPA Region 9 will also have to analyze other forms of capacity when considering grant applications. For example, Tribes will have to demonstrate that they have the ability (either in-house or with the assistance of the Indian Health Service or another appropriate agency) to meet EPA's grant management requirements and properly oversee the construction project. These issues are discussed further in Section III.

The above capacities and abilities are not only requirements for this grant program, but also valuable for any water system. Tribes wishing to receive more information about improving the technical, managerial, and financial capacity of their systems, or other project management skills should contact their EPA 9 PWSS Project Officer (see Section X).

VIII. Instructions for Completing the Project Proposal Form

Tribes must fill out a copy of the attached form for **each** project to be placed on the priority list. Additional sheets of paper may be attached as necessary to ensure that EPA receives complete information to consider in evaluation project proposals. The project proposal should include completed feasibility studies and environmental documents if available. See below for specific directions.

1. Under Service Area Information, list the total population served by the public water system(s), the number of connections, and the number and percentage of metered connections.

2. Under Project Description, give a general description of the overall project and the specific components proposed. Also list any aesthetic water quality problems that the project will address (e.g. taste, odor, color, clarity).

3. Under Project Cost, list each project component by the letter of the health problem it addresses. Use the Health Category chart presented in Section IV for the appropriate letter. Also note the number of connections that will benefit from each component of the proposed project. For example, for a pipeline rehabilitation project, list the number of connections served by that portion of pipeline. For a modifications to a treatment plant, list the total number of connections served by that treatment plant.

4. The form must be signed by a person certifying that the information supplied is accurate.

IX. References/Footnotes

Sections of this guidance were adopted from materials produced by the following agencies:

California Department of Heath Services (Project Selection Criteria - Health Categories)

U.S. Department of Agriculture, Rural Utility Service (Feasibility Study Requirements)

Rural Community Assistance Corporation (Capacity Checklists)

Indian Health Service (Capacity Checklists)

South Dakota Department of Environment and Natural Resources (Capacity Checklists)

U.S. EPA Region 8

Footnoted references are as follows:

1. 42 U.S.C. 300j-12(i)(1)

2. 42 U.S.C. 300j-12(a)(2)

3. 42 U.S.C. 300j-12-(i)(2)

4. U.S. EPA Draft Tribal Set-Aside Guidelines (national), p. 13

5. U.S. EPA Draft Tribal Set-Aside Guidelines (national), pp. 17-18

6. U.S. EPA Draft Tribal Set-Aside Guidelines (national), p. 6

X. Who to Contact

Karl Banks, Program Manager **Western Arizona, Lower Colorado River Area**	(415) 972-3557
Danny Collier, Program Manager **San Carlos and Gila River Indian Tribes**	(415) 972-3565
Su Cox, Program Manager **Northern & Central California**	(415) 972-3555
Helen McKinley, Program Manager **Southern California**	(415) 972-3559
Kevin Ryan, Program Manager **Navajo Primacy Oversight,** **Hopi and Kaibab Paiute**	(415) 972-3554
Brian Smith, Program Manager **Navajo Systems Regulated by USEPA**	(415) 972-3580
Roger Yates, Program Manager **Nevada, Owens Valley, White River Reservation** **and Tohono O'odham Nation**	(415) 972-3549

Appendix A

Feasibility Study Requirements

I. GENERAL. A Feasibility Study should clearly describe the owner's present situation, analyse alternatives, and propose a specific course of action, from an engineering perspective. **The level of effort and depth of analysis required for the feasibility study are proportional to the size and complexity of the proposed project.** The following should be used as a guide for the preparation of the Feasibility Studies.

II. PROJECT PLANNING AREA. Describe the project area under consideration in the context of the existing and projected water system service area. The description should include information on the following:

A. Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevation, etc.

B. Growth Areas and Population Trends. Specific area(s) of concentrated growth should be identified. Population projections for the project planning area should be provided for the design period. These projections should be based on historical records with justification from recognized sources.

III. EXISTING FACILITIES. Describe the existing facilities including at least the following information:

A. Location Map. Provide a schematic layout and general service area map (map should be identified in project planning area maps of Section II. A. above).

B. History. (Only if requested by EPA)

C. Condition of Facilities. Describe present condition; suitability for continued use; adequacy of water supply (quantity & quality); and, if any existing central facilities, the treatment, storage, and distribution capabilities.

IV. NEED FOR PROJECT. Describe the needs in the following order of priority:

A. Describe current health risks and/or significant Safe Drinking Water Act non-compliance issues, and any anticipated health risks and/or significant Safe Drinking Water Act non-compliance issues after the project is completed.

B. Describe the current O & M issues and those anticipated after the project is complete.

C. Describe the reasonable growth capacity that is necessary to meet needs during the life of the improved portion of the system.

D. Other Benefits. Describe any other benefits resulting from this project (e.g. improvements in aesthetic quality of water).

V. ALTERNATIVES CONSIDERED. This section should contain a description of all reasonable alternatives (and a no-action alternative) considered in planning a solution to meet the identified need. The description should include the following information on each alternative:

A. Description. Describe the facilities associated with the alternative. Describe all feasible water supply sources and provide comparison of such sources. Also, describe treatment, storage and distribution facilities.

B. Design Criteria. State the design parameters used for evaluation purposes.

C. Map. Schematic layout.

D. Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired or leased.

E. Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.

F. Environmental Document. Describe unique direct and indirect impacts on flood plains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. EPA must conduct an environmental assessment prior to project approval.

G. Cost Estimates.

1. Construction

2. Non-Construction and Other Projects.

3. Annual Operation and Maintenance.

4. Present Worth, based on Federal discount rates (obtained from federal reserve board, website: http://www.bog.frb.fed.us/releases/H15/update/)

H. Compare and contrast each alternative. A matrix may be helpful to display results. At a minimum the following items should be addressed:

1. Environmental Impacts

2. Annual O & M costs

3. Required operational expertise

4. Ability to achieve compliance with Safe Drinking Water Act requirements

5. Ability to address public health concerns

6. Total construction & non-construction costs

7. Other Tribal concerns

VI. PROPOSED PROJECT (Recommended Alternative). This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At a minimum, the following information should be included (if applicable):

A. Project Design.

1. Water Supply. Include requirements for quality and quantity. Describe recommended source, including site.

2. Treatment. Describe process in detail and identify location of plant site and any process discharges.

3. Storage. Identify size, type, site location.

4. Pumping Stations. Identify size, type site location and any special power requirements.

5. Distribution Layout. Identify general location of line improvements; lengths, sizes, materials, and key components.

6. Hydraulic Calculations. This information should provide sufficient detail adequate for sound engineering design. Automation tools must be used by the engineer (EPANET, a free EPA hydraulic and water quality simulation program is available at website: http://www.epa.gov/ordntrnt/ORD/NRMRL/wswrd/epanet.htm). The submittal should include a map with a list of nodes and pipes and The associated characteristics, such as elevation of node, pipe demands, fire flow, hydraulic calculations, etc.

B. Cost Estimate. Provide an itemized estimate of the project cost based on the anticipated period of construction. Include development and construction, and land acquisition associated with the proposed project.

C. Annual Costs of Recommended Alternative After Project Improvements. Project operations and maintenance costs and capital improvement costs realistically. In the

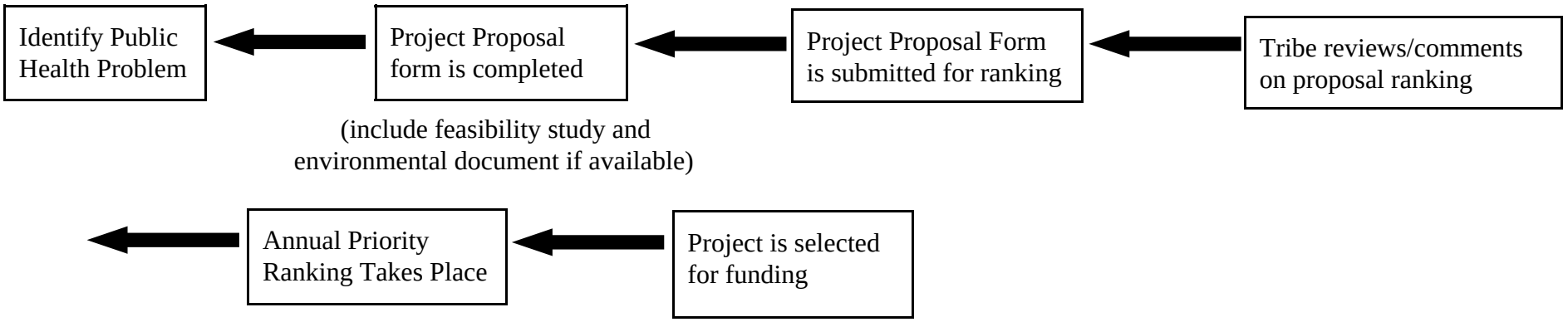
absence of other reliable information, base data on actual costs of other existing facilities of similar size and complexity. Include facts in the study to substantiate operation and maintenance cost estimates. Include salaries, wages, taxes, accounting, and auditing fees, legal fees, interest, utilities, gasoline, oil and fuel, insurance, repairs, maintenance, supplies, chemicals, replacement costs, purchased water costs, office supplies and printing, and other miscellaneous costs. For capital improvement, include all costs necessary to plan, design, and construct the new facility.

VII. CONCLUSIONS AND RECOMMENDATIONS. Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, the need for special coordination, a recommended plan of action to expedite project development, etc.

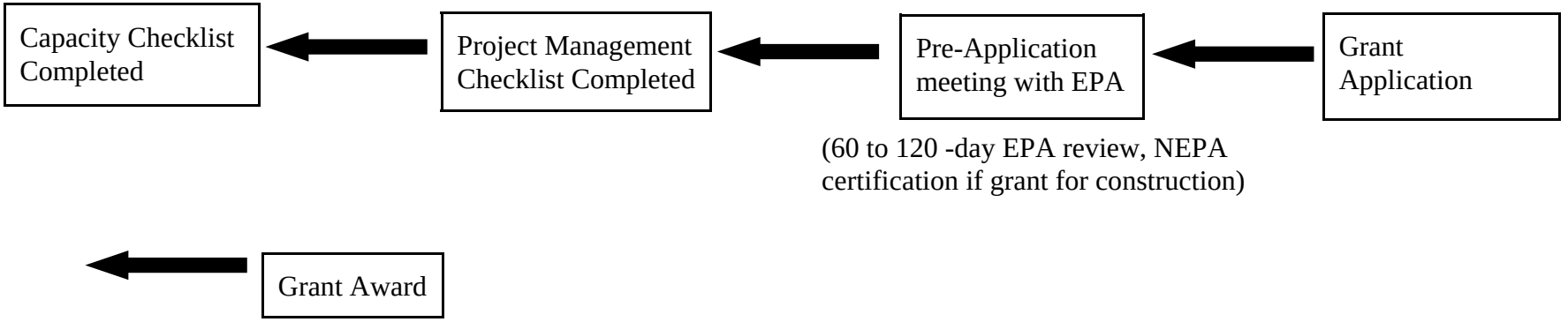
Appendix B

Grant Flow Chart

1. Evaluate Need for Project/Project Proposal:

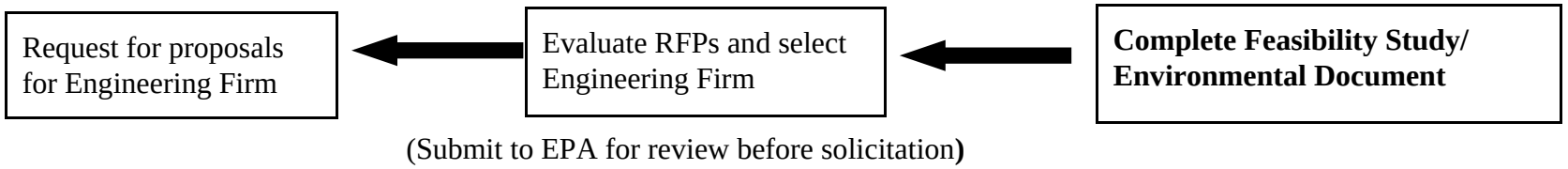


2. Formal Grant Application:



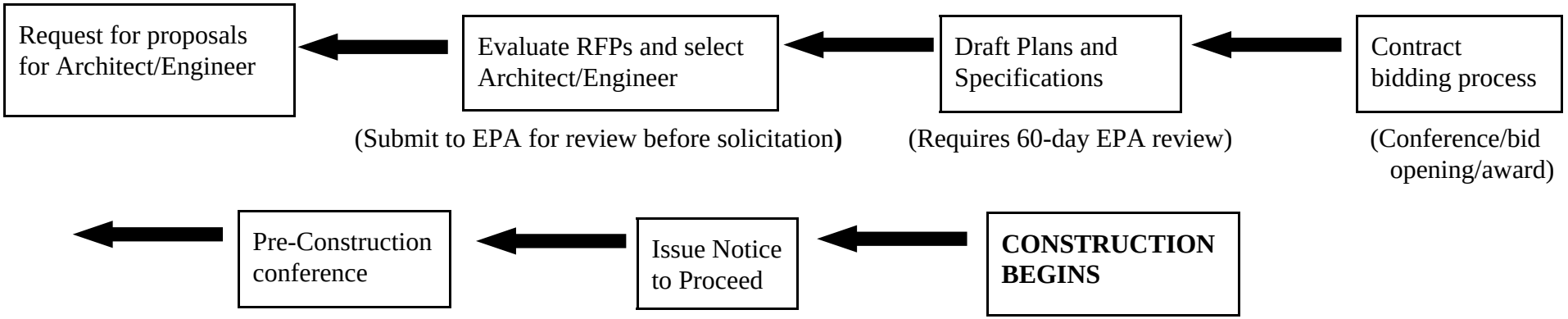
Grant Flow Chart (continued)

3. Completion of the Grant-Funded Project (Planning):



(Submit to EPA for review before solicitation**)**

3. Completion of the Grant-Funded Project (Construction):



Appendix C

Sample Programmatic and Administrative Conditions

Grants will include certain programmatic conditions in addition to the usual administrative conditions. However, conditions do not relieve grantees of the responsibility of insuring that federal funds are correctly used and that the project objectives are met and that procurement procedures comply with Federal Regulations (40 CFR Part 31.36). Review of contracts, plans and specifications by or for EPA is for administrative purposes only and does not relieve the recipient of its responsibilities.

- The grantee shall submit all Architectural/Engineering scopes of work to the EPA Project Officer for review and comments prior to solicitation of such services.

- Prior to signature, the grantee shall submit to the EPA Project Officer for review and comments, the contracts, the contractor's name, and the contract cost breakdown for all contracts they plan to issue for activities provided for in the agreed upon work plan and any amendments thereto.

- The recipient agrees not to bill or request reimbursement from EPA for any costs associated with the design or construction of the project funded by this grant, except for planning, environmental review, and/or conceptual design, until EPA has complied with the National Environmental Policy Act and other environmental cross-cutters (see 40 C.F.R. 6.300 et seq) applicable to this project. If the grantee incurs such costs prior to the completion of any required environmental review, it does so at its own risk. Further, upon completion of the planning and final design for the project, including the environmental review, and if required by the EPA Project Officer, the grantee shall amend any work plan previously submitted to and approved by EPA in order to reflect the final design of the project. **(This condition is required for the award of construction funding prior to completion of the environmental review process.)**

- The grantee's designated representative(s) shall notify the EPA Project Officer before contracted field work begins, to allow oversight inspection and to ensure that work is conducted in accordance with the approved scopes of work, specifications, and schedules. The designated representative(s) shall be available during the active stages of the project to ensure the project progresses in a timely manner and on a continuous basis.

- With each Request for Advance or Reimbursement (SF-270) the recipient will submit for approval to the EPA Project Officer a breakdown of expenditures by object class category. Also, under the Personnel category the recipient will submit a breakdown for each tribal employee, and under the Contractual category, a breakdown for each contract.

- The grantee shall submit to the EPA Project Officer copies of all project contract deliverables.

S The grantee shall prepare the Environmental Information Document in accordance with 40 CFR § 6. The grantee shall submit a final draft of the EID and all related documents to the EPA Project Officer for review and comments prior to report completion. A suggested outline is available upon request.

S At least two persons employed by (or working for, on a volunteer basis) the entity most directly responsible for the routine operation and maintenance of the public water supply system shall attend the indicated training courses (subject to the approval of the EPA Project Officer) designed to assist in attaining the minimum level of certification available for water system operators appropriate to the operation and maintenance needs of the water system.

( ) Electrical Controls
( ) Water Distribution Field Operations
( ) Drinking Water Disinfection
( ) Iron/Manganese Removal System Operation
( ) Effective Maintenance Management
( ) Pumps and Controls
( ) Nitrate Removal System Operation

S The grantee shall prepare up-to-date "as-builts" of the water supply system.

- The grantee shall conduct an inventory of existing vehicles, tools, measurement devices, and spare parts available for use by the system. The grantee must indicate, in the inventory report, if the items are owned by the system, rented, borrowed, or available by some other arrangement. The grantee shall also prepare a list of items needed by the system, but currently unavailable, to perform routine operations and maintenance on the system. The grantee shall submit a plan for acquiring these items or otherwise arranging to rent, lease, or borrow them through a mutual aid plan.

- The grantee shall submit a 5-year operating plan for the operation and maintenance of the public water system. The plan shall include, at a minimum, an annual budget for the 5 years, a staffing plan, a capital replacement plan, an updated operations manual or standard operating procedures, a training plan, a safety plan, and an emergency plan. The budget shall include, at a minimum: 1) sinking fund which shall include the estimated replacement costs, 2) operating fund which shall include chemical costs, power, staffing, and routine maintenance, and 4) current revenues and future projected sources of revenue. Example spreadsheets are available from the EPA Project Officer upon request.

- The grantee shall conduct an analysis of the system's financial health and determine any steps that must be taken to secure good financial standing. This analysis shall include a study of the current rate structure or revenue source(s) and development of a new rate structure if the current rate structure or revenue source(s) is inadequate to secure good financial standing. The grantee agrees to adopt the new rate structure and any implementing rules and regulations needed to ensure customer compliance with the rate structure.

- The grantee agrees to establish a separate reserve fund solely for the purpose of replacing water system infrastructure reaching the end of its useful life

- The grantee shall prepare a monitoring schedule, subject to EPA approval, by which they shall agree to complete required SDWA compliance monitoring before <<date>>.

- The grantee shall establish an entity to manage and operate the water system. The Tribe agrees to develop bylaws and ordinances by which the entity will operate and interact with its customers.

- The grantee agrees to contact the EPA Project Officer, to arrange for general training on source water protection programs. The Tribe shall, by <<date>>, develop a written source water protection plan, including steps and schedule for implementation.

- The grantee will comply with Federal Executive Orders 11988 and 11990, concerning floodplain management and protection of wetlands, respectively. As of the date of this grant award, no new development in the 100-year floodplain shall be served by this project.

- The grantee agrees to submit the the EPA Project Officer, within 60 days of grant award, a payment schedule for disbursement of grant funds.

- The grantee agrees that it will expeditiously initiate and complete the project work for which assistance has been awarded under this agreement in a timely manner and in accordance with all applicable provisions of 40 CFR Part 31. The recipient warrants, represents, and agrees that it and its contractors, subcontractors, employees, and representatives will comply with: (1) all applicable provisions of 40 CFR Part 31 and (2) any special conditions set forth in this assistance agreement or any assistance amendment.

- EPA or its designate may inspect the project at any time. In addition, any construction contract must provide that representatives of EPA will have access to the work and any books, documents, papers, and records of the contractor. The project will be evaluated to ensure timely completion and expenditure of allowable costs.

- Any contract modifications and amendments that change the scope or objectives of the project or substantially alter the design must be submitted to the Project Officer at EPA. Such modifications or amendments must receive prior written approval from the EPA Project Officer before further grant payments can be made. Also requiring prior approval would be any budget revision which would result in the need for additional funds, any budget transfer from nonconstruction to construction or vice-versa, the need to extend the availability of funds, or changes in key persons specified in the grant application.

- The Grantee shall acquire and maintain any flood insurance made available to it under the National Flood Insurance Act of 1968, as amended. The insurance shall be in an

amount at least equal to the total eligible project costs, excluding cost of land and uninsurable improvements, or to the maximum limit of coverage made available under the National Flood Insurance Act of 1968, as amended, whichever is less, for the entire useful life of the project.

This condition shall not be applicable if, on the date of the execution of the grant agreement by both parties, flood insurance was not available pursuant to the Flood Insurance Act of 1968, as amended, for property in the project location. This condition shall not be applicable if the project location is outside the boundaries of a special flood hazard area delineated on a Flood Hazard Boundary Map or Flood Insurance Rate Map which has been issued by the Department of Housing and Urban Development, Federal Insurance Administration. This condition shall not be applicable if the total value of improvements insurable under the National Flood Insurance Act is less than $10,000.

- Based on an archeological survey of the project site, EPA Region 9 shall determine if there are any cultural resources eligible for listing on the National Register of Historic Places. The State Historic Preservation Officer (SHPO) must concur in this determination prior to issuance of Notice to Proceed. Also, should there be any resources eligible for listing, mitigation measures shall be agreed to by the grantee to the satisfaction of EPA and SHPO. Should the discovery of a potential archeological or historical resource occur during construction, all work in the area of the find will stop and a qualified archeologist will be called in to evaluate the situation and make recommendations to the EPA Project Officer. The Project Officer will then determine what will be necessary for construction to proceed.

- This grant may be terminated if any portion of the approved schedule for the project is not met. If significant delays are anticipated, the grantee must request a written waiver of the schedule from the EPA Region 9 Water Division. Milestones which must be met are those in the approved workplan.

- The Grantee must submit to the EPA Project Officer a copy of the bid tabulations for the project.

- A performance certification will be necessary a year after the project has been completed. To certify the project, EPA (or our designate) will inspect the construction site to determine if the project is operating as designed and is meeting its design standards.

- All mitigation measures listed in the Environmental Assessment shall be implemented and are hereby incorporated by reference.

- The grantee shall monitor and provide a monthly report to the EPA Project Officer on actual performance during the construction. In addition, the grantee shall notify EPA at any point in time should any significant developments arise, such as those that might alter or delay the project.

Attachment 1

Project Proposal Form

Environmental Protection Agency, Region 9
Drinking Water Tribal Set-Aside Grant

Project Proposal Form

Directions: See Section VIII of the Guidance to Applicants

Applicant Information	Tribe Submitting Proposal_____ Did you receive drinking water Tribal set-aside money for this project this year? _____ Did you receive drinking water state revolving fund money for this project this year? _____
Contact Information	Name_____ Title_____ Email _____ Address _____ Fax Number _____ _____ Phone Number _____
Service Area Information	Total Population Served_____Total number of connections _____ Number of meters_____Percent of connections metered _____ Is billing based on meter readings?_____ Number of Tribal people served by project(s) _____ Number of non-Tribal people served by project(s)_____
Water Utility Information	Project Location_____ Water System Owner_____ Will the proposed project be owned by a different entity? If yes, please explain _____ _____ Is this a Public Water System?_____ If Yes: What is the Public Water System ID Number? _____ Is this a Community or non-Community Water System? _____ Is this a For-Profit or Non-Profit Water System? _____ Does this system have a certified water operator? _____
Water Supply Information	How many storage tanks are connected to the system? _____ What is the capacity of each tank (in gallons)? _____ _____ _____ _____ _____ _____ _____ How many wells are connected to the system? _____ What is the maximum capacity of each well (in gpm)? _____ _____ _____ _____ _____ _____ _____ How many pressure zones are in the system? _____ Describe each pressure zone (i.e. which tanks are used for each zone). _____ _____ _____ Are there water outages? _____ If so, how often? _____ What is the reason for the outages? _____

Environmental Protection Agency, Region 9
Drinking Water Tribal Set-Aside Grant

Project Proposal Form (continued)

Other Background Information	Describe any existing conservation measures _____ _____ Does the Tribe and/or water utility have a source or wellhead protection program? _____ Is the Tribe or system in the process of implementing one of the above programs? _____ Is the proposed project a consolidation project?_____If so, how many systems will be consolidated?_____What are their populations? _____
Project Need	Describe why this project is necessary _____ _____ _____ _____ _____
Project Description	Description of Proposed Project_____ _____ _____ _____
Project Cost	Estimated Total Project Cost $_____ Cost Breakdown by Health Category: Health Category / Corresponding Project Component / Estimated. Component Cost / # Connections Benefitting / Population Served 1)_____ _____ $_____ _____ _____ 2)_____ _____ $_____ _____ _____ 3)_____ _____ $_____ _____ _____ 4)_____ _____ $_____ _____ _____
Committed Funding	Have other entities committed to contribute funding for this project?_____ If so, describe commitment_____ Have you applied for funding from other agencies?_____ If so, which agencies?_____
Project Status	Feasibility Study Complete? ☐Yes ☐No If Yes, please attach Environmental Information Document Complete? ☐ Yes ☐No If Yes, please attach Design Complete ☐ Yes ☐No If Yes, please attach

Signature of Person Certifying this information is accurate_____

Title of Above Person_____ Date_____